

BIOGRAPHICAL SKETCH

NAME Phani Raj Pokkuluri	POSITION TITLE Biophysicist		
eRA COMMONS USER NAME PHANIP			
EDUCATION/TRAINING			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Nagarjuna University, India Mathematics and Physics (ancillaries)	B.Sc.	1982	Chemistry
Indian Institute of Technology, Kanpur, India	M.Sc.	1984	Chemistry
University of British Columbia, Vancouver, Canada	M.Sc.	1987	Chemistry
University of British Columbia, Vancouver, Canada	Ph.D.	1991	Chemistry

A. Positions and Honors

Positions and Employment

- 1985-1990 Teaching Assistant, University of British Columbia, Vancouver, Canada
 1991-1993 Research Associate position at National Research Council's Biotechnology Research Institute, Montreal, Canada
 1994-1999 Post doctoral research fellow at Argonne National Laboratory, Argonne, IL
 1999-2004 Assistant Biophysicist, Argonne National Laboratory, Argonne, IL
 2004-Present Biophysicist, Argonne National Laboratory, Argonne, IL

B. Selected peer-reviewed publication

- Pokkuluri, P.R., J.R. Scheffer, J. Trotter. Surface Versus Bulk Reactivity in Solid State Organic Chemistry. *Tetrahedron Lett.*, **30**, 1601-1604 (1989).
- Pokkuluri, P.R., J.R. Scheffer, J. Trotter. Novel Photorearrangements of Bridgehead-Substituted Dibenzobarrelene Derivatives in Solution and the Solid State. *J. Am. Chem. Soc.*, **112**, 3676-3677 (1990).
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- Scheffer, J.R., P.R. Pokkuluri. Review: Unimolecular Photoreactions of Organic Crystals. The Medium is the Message, in *Photochemistry in Organized & Constrained Media*, Ed. V. Ramamurthy, VCH publishers, NY, (1991), pp 185-246.
- Pokkuluri, P.R., J.R. Scheffer, J. Trotter, M. Yap. Selective Solid State Photorearrangement through the Less Stable of Two Possible Biradical Intermediates, *J. Org. Chem.*, **57**, 1486-1494 (1992).
- Pokkuluri, P.R., J.R. Scheffer, J. Trotter. Crystal Structure Correlations in the Photochemistry of Dimethyl 9,10-dimethyl-9,10-dihydro-9,10-ethenoanthracene-11,12-dicarboxylate. *Acta Cryst.*, **B49**, 107-116 (1993).
- Pokkuluri, P.R., J.R. Scheffer, J. Trotter. Crystal Structure Correlations in the Photochemistry of Dimethyl 9-Phenyl-9,10-dihydro-9,10-ethenoanthracene-11,12-dicarboxylate. *Acta Cryst.*, **B49**, 754-760 (1993).
- Pokkuluri, P.R., J.R. Scheffer, J. Trotter. Cyclooctatetraene Formation in the Photolyses of Dibenzobarrelene Diesters. *Acta Cryst.*, **B49**, 1049-1052 (1993).
- Pokkuluri, P.R., F. Bouthillier, Y. Li, A. Kuderova, J. Lee, M. Cygler. Preparation, Characterization of an Antibody Fab Fragment that Recognizes RNA: Crystal Structures of Native Fab and Three Fab-Mononucleotide Complexes. *J. Mol. Biol.*, **243**, 283-297 (1994).

- Rajagopalan, K., G. Pavlinkova, S. Levy, P.R. Pokkuluri, M. Schiffer, B.E. Haley, H. Kohler. Novel Unconventional Binding Site in the Variable Region of Immunoglobulins. *Proc. Natl. Acad. Sci. U.S.A.* **93**, 6019-6024 (1996).
- Pokkuluri, P.R., D-B. Huang, R. Raffen, X. Cai, G. Johnson, P. Wilkins Stevens, F.J. Stevens, M. Schiffer. A Domain Flip as a Result of a Single Amino-acid Substitution. *Structure*, **6**, 1067-1073 (1998).
- Raffen, R., L. Dieckman, M. Szpunar, C. Wunschl, P.R. Pokkuluri, P. Dave, P. Wilkins Stevens, M. Schiffer, F.J. Stevens. Physicochemical Consequences of Amino Acid Variations that Contribute to Fibril Formation by Immunoglobulin Light Chains. *Prot. Sci.*, **8**, 509-517 (1998).
- Pokkuluri, P.R., A. Solomon, D.T. Weiss, F.J. Stevens, M. Schiffer. Tertiary structure of human λ 6 light chains. *Amyloid* **6**, 165-171 (1999).
- Pokkuluri, P.R., X. Cai, F.J. Stevens, and M. Schiffer. Change in Dimerization Mode by Removal of a Single Unsatisfied Polar Residue Located at the Interface. *Prot. Sci.* **9**, 1852-1855 (2000).
- Stevens, F.J., P.R. Pokkuluri, and M. Schiffer Protein Conformation and Disease: Pathological Consequences of Analogous Mutations in Homologous Proteins. *Biochemistry* **39**, 15291-15296 (2000).
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- Pokkuluri, P.R., P.D. Laible, Y.-L. Deng, T.N. Wong, D.K. Hanson, and M. Schiffer. The structure of a mutant photosynthetic reaction center shows unexpected changes in main chain orientations and quinone position. *Biochemistry* **41**, 5998-6007 (2002).
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- Pokkuluri, P.R., M. Gu, X. Cai, R. Raffen, F.J. Stevens, and M. Schiffer. Factors contributing to decreased protein stability when aspartic acid residues are in β -sheet regions. *Protein Science*, **11**: 1687-1694 (2002).
- Pokkuluri, P.R., Y.Y.Londer, N.Duke, W.C.Long, M. Schiffer. Family of cytochrome *c7*-type proteins from *Geobacter sulfurreducens*: The structure of one cytochrome *c7* at 1.45 Å resolution. *Biochemistry*, **43**, 849-859 (2004).
- Pokkuluri, P.R., P.D. Laible, A.E. Crawford, J.F. Mayfield, M.A. Yousef, S.L. Ginell, D.K. Hanson, and M. Schiffer. Temperature and cryoprotectant influence secondary quinone binding position in bacterial reaction centers. *FEBS Lett.* **570**:171-174 (2004).
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- Londer, Y.Y., P.R.Pokkuluri, M.Schiffer. Functional expression of multiheme cytochromes *c* in *E. coli*, *PharmaGenomics* **4**; 24 – 30 (2004).
- Pessanha, M., Y.Y.Londer, W.C.Long, J.Erickson, P.R.Pokkuluri, M.Schiffer, C.A.Salgueiro. Redox characterization of *Geobacter sulfurreducens* cytochrome *c7*: Physiological relevance of the conserved residue F15 probed by site-specific mutagenesis. *Biochemistry*, **43**; 9909-9917 (2004).
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- Y. Y.Londer, P. R.Pokkuluri, V.Orshonsky, L.Orshonsky, M.Schiffer. Heterologous expression of dodecaheme "nanowire" cytochromes *c* from *Geobacter sulfurreducens*. *Protein Express. Purifi.* **47**, 241-248 (2006).
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